

ABSTRACT

A transfer and positioning apparatus includes a positioning assembly located between the tracks of a dual lane conveyor and upstream of a lane changer. The positioning assembly includes a retractable shaft for stopping a carrier along a first conveyor adjacent the assembly. A pair of gripper arms are pivotally mounted to move between an open position permitting the carrier to pass along the conveyor track, and a closed position with forward ends in contact with the a specimen container on the carrier to position the container in a reference location for direct processing. The lane changer includes a shuttle depending from an overhead support with a pair of arms for receiving and shifting a specimen carrier from one conveyor to a second conveyor of a dual-conveyor track. The shuttle is operable to retain a specimen carrier along either the first or second conveyor and to release a specimen carrier along either the first or second conveyor. Sensors are located to detect the presence of a specimen carrier at each of the retention locations, and to confirm the release of a specimen carrier from the shuttle along each of the conveyors. A queue is positioned upstream of the positioning assembly and includes retractable shafts, sensors and scanners for selectively retaining, detecting and scanning identification data from a specimen carrier on either conveyor upstream of the shuttle.